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ABSTRACT

The 52 citations listed were compiled to assist educators in the task of designing and implementing minimum competency testing programs. The documents cited were chosen to represent the best and most current literature on minimum competency testing. Entries are arranged alphabetically by author/corporate author, followed by title, imprint, date, pagination, source of availability, and annotation. To provide the reader with a system for categorizing the citations, articles dealing primarily with minimum competency measurement issues are coded "M", papers addressing legal issues are coded "L", other bibliographies on competency testing are coded "B", and the sizeable number of citations that do not fit neatly into one of these three categories is coded "G". The documents listed are obtainable through the ERIC system, from the original source, or from academic libraries. (Author/JPF)

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Annotated Bibliography on Minimum Competency Testing

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Clearinghouse for Applied Performance Testing
Northwest Regional Educational Laboratory
May 1978

PREFACE

As state and local education agencies begin the task of designing and implementing minimum competency testing programs, educators are faced with a great need for information, ideas, and advice concerning this relatively new area of testing. This bibliography was created to help meet that need.

The documents cited were chosen to represent the best and most current literature on minimum competency testing. Emphasis was placed on selecting articles and monographs that would aid educators in dealing with the many issues they encounter. In any attempt to survey the literature of a particular field, decisions must be made about what should be included and excluded. Clearly, the minimum competency testing literature overlaps with the areas of competency based education, criterion referenced testing, and educational accountability, to mention only a few. This bibliography does not attempt to cover the massive amount that has been written in these areas.

Citations are listed alphabetically by author. To provide the reader with a system for categorizing the citations, a code letter is placed in the margin. Articles dealing primarily with minimum competency measurement issues are coded "M"; papers addressing legal issues are coded "L"; other bibliographies on competency testing are coded "B"; and the sizeable number of citations that do not fit neatly into one of these three categories are coded "G".

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Anderson, E. N. *Coping With Oregon's New Competency-Based Graduation Requirements--View from a Practitioner.* Paper presented at
G the Annual Meeting of the American Educational Research Association, 1975. 13 pp. ED 105 594. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

Oregon's new graduation requirements represent a bold effort to implement a mandated statewide competency-based program at the K-12 public school level. All the various ramifications of instituting a change of this magnitude cannot be predicted at this early date, but one major effect already evident in that local school districts have begun to conduct, perhaps for the first time in 40 years, a massive critical reassessment of all aspects of their educational programs. The motivating force in the reassessment process has been the need to determine procedures for transforming the theoretical constructs set forth in the graduation requirements into operational procedures for implementation in the local districts. The major purposes of this paper are to present background information about the new Oregon graduation requirements, to identify several major problems faced by Oregon school districts in operationalizing the new graduation requirements, and to describe the role of the consortium approach in providing technical assistance to local school districts.

Ainsworth, D. Examining the Basis for Competency-Based Education. *Journal of Higher Education,* May/June 1977, 48 (3), 321-332.
G

The author argues for the separation of an institution's testing function from its teaching function. He claims that the current concept of competency attainment has limited utility: in many content areas it has not reduced the ambiguity of educational objectives, has not helped in determining curricular content, and has seriously lowered educational standards. Elaborations on this theme stem from his practical experience at a competency-based institution.

Association of California School Administrators. *The Hart Act (AB 3408). ACSA Special Report. Vol. 6, No. 3.* Burlingame,
G CA: Association of California School Administrators, 1977. 13 pp. ED 132 739. (Hard copy available from ACSA, 1575 Old Bayshore Highway, Burlingame, CA 94010--$0.50. EDRS Price: MF--$0.83 Plus Postage, HC--not available from EDRS)

The Hart Act, recently adopted by the state of California, mandates that school districts establish mechanisms of assessing minimal competencies in secondary education before students may receive a diploma. In this report, assemblyman Gary Hart, the bill's author, and Don McKinley, chief deputy to the Superintendent of Public Instruction, discuss the implications of the Hart Act and graduation and competency standards in general. Issues discussed include the possible de facto segregation of minorities into remedial classes and the treatment of learning handicapped students. Hart stresses the bill offers mostly recommendations and suggestions to school districts to identify students that need help in meeting minimal competencies.

Bossone, R. M. & Troyka, L. Q. *National Conference on Minimum Competencies: Trends and Issues. Proceedings.* New York:
G Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York, 1977. 119 pp. ED 141 404. (Available from CUNY Research Foundation, Center for Advanced Study in Education, Graduate School of City University of New York, 33 West 42nd Street, New York, NY 10036--$3.00. EDRS Price: MF--$0.83 Plus Postage, HC--not available from EDRS)

On March 4, 1977, the Center for Advanced Study in Education (CASE) of the Graduate School and University Center of the City University of New York (CUNY) and the Board of Education of the City of New York co-sponsored a National Conference on Minimum Competencies: Trends and Issues. Six papers were presented: "An Overview Regarding Minimal Competencies: Problems and Opportunities", by Gordon Ambach; "The Dangers of Knowing Precise Answers to the Wrong Questions", by H. A. Wilson; "Item Characteristics and Criteria", by Donald Ross Green; "The Need for Test Security", by Anthony Polemeni; and "What Everyone Should Know About Minimum Competencies", by Richard M. Bossone and Lynn Quitman Troyka.

Brickell, H. M. *Let's Talk About...Minimum Competency Testing.* Denver, CO: Education Commission of the States, 1978. 44 pp.
G (Available from Publications Office, Education Commission of the the States, Suite 300, 1860 Lincoln Street, Denver, CO 80295--$5.00, discounts for five or more copies)

Brickell's paper "Seven Key Notes on Minimum Competency Testing," originally prepared for the ECS/NIE workshops on minimum competency testing, is elaborated into a combined discussion guide and questionnaire in this ECS publication. It has many possible uses--oragnizing consideration of the issues surrounding minimum competency testing in meetings of state or local study committees, informing various public audiences, and gathering opinions of these groups about the issues it raises. The introduction describes several plans for use of the document. Eight discussion guides present arguments and options dealing with the following questions: Will you test minimum competencies? What competencies will you require? How will you measure them? When will you measure them? How many minimums will you set? How high will you set the minimums? Will you set them for schools or for students? What will you do about the incompetent? Three copies of a detachable questionnaire covering the eight discussion questions are included.

(Editor's note: Brickell's paper, "Seven Key Notes on Minimum Competency Testing," appears in the April 1978 issue of *Educational Leadership*, pp. 551-556, and in the May 1978 issue of *Phi Delta Kappan*, pp 589-591.)

California State Department of Education. *Resource Catalog for Proficiency Assessment.* Sacramento, CA: California State
B Department of Education, 1977. 26 pp. (Available from the Office of Program Evaluation and Research, California State Department of Education, State Education Building, 721 Capitol Mall, Sacramento, CA 95814)

This annotated bibliography on competency testing was prepared as a resource for California educators in implementing the state's recently passed legislation mandating proficiency assessment. It cites materials addressing general aspects of competency testing, measurement issues, and background on proficiency assessment in California. Of particular usefulness to the practitioner are four sections dealing with specific subject matter competencies. The documents cited are available through the ERIC system or from the San Mateo Educational Resource Center.

Cawelti, G. Requiring Competencies for Graduation--Some Curricular Issues. *Educational Leadership*, November 1977, 35 (2), 86-91.
G

The author argues for a re-examination of the nature of general education for secondary students and suggests that competency-based education (CBE) could benefit this movement. He warns that current CBE could trivialize the curriculum if care is not taken to broadly define general education as stemming from five clusters: learning skills; health, physical education and leisure; career education; cultural studies; and societal studies.

Clark, J. P. & Thomson, S. D. *Competency Tests and Graduation Requirements.* Reston, VA: National Association of
G Secondary School Principals, 1976. 76 pp. ED 126 160. (Available from the National Association of Secondary School Principals, 1904 Association Drive, Reston, VA 22091. EDRS Price: MF--$0.83 Plus Postage, HC--not available from EDRS)

The use of a variety of specific competency tests that measure skill achievement required for high school graduation are reviewed in this monograph. The successful performance of certain competencies ordinarily is viewed as an important adjunct of course work. They are not seen by most schools as a replacement for course work, but rather as one significant step toward giving the diploma. The monograph addresses the dual question of assisting students while at the same time insisting that the diploma regain meaning. It provides a background to the competency test movement, and reports on the initiatives taken nationwide to use applied performance tests as a requirement for graduation. Items are presented for several competency tests in current use in the areas of mathematics, reading, writing, democratic process, art, music, and money management. Appendices contain lists of states and schools using competency tests and legislation and State Board rulings concerning competency tests.

Educational Testing Service. *Basic Skills Assessment Around the Nation.* Princeton, N.J.: Educational Testing Service,. G 1977. 23pp. (Available from Basic Skills Assessment, ETS, Princeton, N.J. 08540. No charge)

The booklet includes a short introduction to minimum competency testing, followed by a summary of state and local activity relating to minimum competency testing as of September 1977. The report is useful in providing an overall picture of legislation, board of education policies and competency testing plans across the country.

Eisele, J. E. & Halverson, P. M. Assumptions Underlying Competency-Based Education. *Thrust for Educational Leadership*, November G 1975, 5 (2), 4-6.

This paper represents the opinions of two educators who are presently involved with investigations into competency-based education (CBE). It sets forth the assumptions underlying competency-based education that have been interpreted from statements in literature, from research reports, from observations, and from its proponents and opponents.

Erlandson, D. A. The Case Against Competency-Based Education. *CCBE Notebook*, 1977, 6 (2), 23-26. ED 135 056. (EDRS Price: G MF--$0.83, HC--$1.67 Plus Postage)

Oversimplification, overspecification, and difficulties in assessment are the criticisms most frequently leveled against competency (performance) based education. These problems are exacerbated by state governments and departments of education that have been given very close attention to their mandated competency-based programs. State mandated competency-based programs bear much closer resemblance to their natural parents, the state bureaucracies, than they do to the basic demands of society. Like all bureaucracies, they depend heavily on simplistically defined, interchangeable parts and will sacrifice nearly all other values to maintain them. Although competency-based education (CBE) was intended to guarantee that certified professional educators possess a "minimum" set of skills, in practice, the minimum frequently becomes the maximum achievement expected from students. CBE programs tend to be a dead end for the individuals who pass through them. The proliferation of trivial CBE programs makes it difficult for good ones to exist.

Estes, G. D., et al. *A Criterion-Referenced Basic Skills Assessment Program in a Large City School System.* Paper presented at the M Annual Meeting of the American Educational Research Association, 1976. 20 pp. ED 124 587. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

The Phoenix Union High School System has developed a basic skills assessment program in the areas of Reading and Mathematics. Procedures and considerations used in developing the system are discussed. Preliminary results on validity and reliability of the assessment instruments are presented. An example of criterion-referenced test development using traditional item analysis, reliability, and validity procedures is provided.

Fink, A. *The Use of Data from Competency-Based Measurement: An Instructional Developer's View.* Paper presented at the Annual M Meeting of the National Council on Measurement in Education, 1976. 14 pp. ED 128 469. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

Attention has recently been focused on the need to design and validate instructional materials that guarantee competent student performance. In preparing such products, developers have come to rely on competency-based achievement tests. Unfortunately, expertise for constructing reliable and valid competency-based instruments is not currently available in a form that an instructional developer can readily translate into practice. The formulation of objectives to guide instrument construction is problematic for the developer because few dependable rules exist to help select and state them. Formulating items is also difficult because many developers lack training in test writing. Further, major issues arise when the developer must establish the meaningfulness of the scores that result from competency-based instruments, a difficult and costly task that requires psychometric skill and a generous budget. Finally, a discerning developer knows in advance of instrument validation that little assistance will be available from psychometricians who have long been arguing over the designs and statistics to be used in validating competency-based tests. Data derived from competency-based instruments must therefore be used with caution and confirmed with additional sources of information like observations and interviews. Developers should also require test construction and psychometric expertise.

Glass, G. V. *Standards and Criteria.* Kalamazoo, MI: Evaluation Center, College of Education, Western Michigan University, 1977.
M 55 pp. (Hard copy available from The Evaluation Center, College of Education, Western Michigan University, Kalamazoo, MI 49008--$2.00)

Glass reviews several methods of setting performance standards on criterion referenced tests. He concludes that the usual procedures for setting a passing score on a test are either arbitrary or emanate from a set of arbitrary premises. He argues that to base interpretations and decisions on absolute levels of performance on exercises "will be largely meaningless, since these absolute levels vary unaccountably with exercise content and difficulty, since judges will disagree wildly on the question of what consequences ought to ensue from the same absolute level of performance, and since there is no safe way to relate absolute levels of performance on exercises to success on the job, at higher levels of schooling, or in life."

(Editor's note: The Zieky and Livingston manual, cited elsewhere in this bibliography, is suggested as a companion piece to this paper, providing helpful background on the standard setting methods Glass discusses.)

Green, T. F. *Minimal Educational Standards: A Systemic Perspective.* Paper prepared for the Education Commission of the States/
G National Institute of Education Workshops on Minimum Competency Testing, 1977. 55 pp. (Available from Publications Office, Education Commission of the States, Suite 300, 1860 Lincoln Street, Denver, CO 80295--$2.75)

Green deals with the historical and philosophical influences underlying the movement to establish minimal standards for education. He points out that as educational attainment (defined as graduation from the twelfth grade) has become nearly universal, society "can no longer distribute social benefits on the basis of attainment at that level." By tying educational attainment to standards of educational achievement, the relative value of attainment is restored. Green's major conclusion is that "the movement to establish minimal standards for education is essentially a movement stemming from a political need for more efficient management of the system."

Greene, L. F. The State Assessment Question--An Answer. *Compact,* Summer, 1977, 11 (3), 5-8.
G

In this article, the author argues for both proficiency testing for mastery of basic skills by individuals and statewide assessment to measure the relative efforts of schools. In describing California's programs, he offers thoughts for other states in both individual and collective assessment.

Hall, M. *Competency-Based Education in Oregon: An Overview.* Paper presented at the Annual Meeting of the American
G Educational Research Association, 1975. 12pp. ED 104 026. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

During 1972-74, three separate but interrelated statewide policies were enacted providing the legal basis for moving Oregon public schools and the postsecondary institutions preparing educational personnel for these schools to a competency-based orientation. These three policy areas dealt with 1) changes in the minimum requirements for graduation from high school, 2) changes in the standards on which personnel preparation institutions are accredited and educational personnel are certified, and 3) changes in the minimum school standards used by the state to accredit elementary and secondary schools. A brief review of each of these policy areas is presented.

Herschbach, D. R. Deriving Instructional Content Through Task Analysis. *Journal of Industrial Teacher Education,* Spring 1976,
G 13 (3), 63-73.

Task analysis provides a means of effectively incorporating current learning theory and practice into instructional development methodology. It yields results applicable to specifying performance objectives, designing instructional activities, determining teaching strategies, and evaluating performances. This document provides one model for developing competencies within the vocational area.

Madaus, G. F. & Airasian, P. W. Issues in Evaluating Student Outcomes in Competency-Based Graduation Programs. *Journal of Research and Development in Education*, Spring 1977, 10 (3), 79-91.

G

The authors discuss four issues prevalent in competency-based graduation plans: (1) attitudinal competencies will require more thought and attention for rigorous certification than literary and numeracy competencies, (2) certification standards must be clearly explicated, (3) a competency-based program will require much testing and evaluation time, and (4) damaging effects of a competency-based plan on the individual student need to be assessed.

McClung, M. S. Are Competency Testing Programs Fair? Legal? *Phi Delta Kappan*, February 1978, 59 (6), 397-400.

L

This article is an abbreviated version of McClung's *Clearinghouse Review* paper, in which he discusses several possible legal challenges to minimum competency testing programs.

McClung, M. S. Competency Testing: Potential for Discrimination. *Clearinghouse Review*, September 1977, 11, 439-448.

L

McClung identifies a number of legal problems associated with minimum competency testing programs, and formulates some possible legal challenges against programs that are racially discriminatory. He focuses on the problems of: "(1) racial discrimination; (2) inadequate phase-in periods; (3) tests which are not reliable or have not been validated; (4) inadequate matching of the instructional program to the test; (5) inadequate remedial instruction which creates or reinforces tracking; and (6) unfair apportionment of responsibility between students and educators." McClung illustrates his arguments using the example of the Palm Beach County, Florida minimum competency testing program.

Merrimack Education Center. *Information Topic Package on Minimum Competencies/Graduation Requirements*. Chelmsford, MA: Merrimack Education Center, 1977. (Available from IES/MEC Information Services, Merrimack Education Center, 101 Mill Road, Chelmsford, MA 01824--$15.00)

B

This document includes 76 bibliographic citations, 26 journal article reprints, and 10 documents on microfiche covering various aspects of minimum competency testing. Compiled in December 1977, the *Information Topic Package* covers much of the non-technical literature available as of that date.

Merwin, J. C. *NCME Debate--Resolved: That Measurement Issues in Competency-Based Educational Programs Are Not Different from Those in Other Kinds of Testing*. Paper presented at the Annual Meeting of the American Educational Research Association, 1976. 9 pp. ED 121 855. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

M

The proposition, "That measurement issues in competency-based educational programs (CBE) are not different from those in other kinds of testing (NCBE)" must be declared false. (1) Measurement in CBE focuses on the present while NCBE measurement focuses on information needed for future planning. (2) CBE measurement starts with definitive statements of behavior repertoires at various levels of strata and substrata of specificity. NCBE measurement starts with the need to identify aspects of current behavior predictive of the impact of educational experiences. (3) What the student is asked to do on a test in CBE is defined by behavioral objectives. In NCBE surrogate measures, highly correlated with behaviors taught for can be used to gain efficiency in measurement. (4) Adequacy of sampling of a specified behavior domain is the critical criterion for a test used in CBE. The value of a test in identifying differential impact of educational environments is a critical criterion for NCBE measures. (5) CBE measurements are used to make a two-way classification with accuracy--competent or not competent as defined by a stated standard regarding a specified behavioral repertoire. NCBE measurement normally calls for reliable identification of multiple levels of individual differences that are related to decisions that must be made.

Meskauskas, J. A. Evaluating Models for Criterion-Referenced Testing: Views Regarding Mastery and Standard-Setting. *Review of Educational*
M *Research*, Winter 1976, 46 (1), 133-158.

The author discusses two measurement issues of the criterion-referenced approach to evaluation: (1) the definition of mastery and (2) setting standards. Three continuum criterion-referenced models are described in which mastery is viewed as continuously-distributed ability. Two state criterion-referenced models define mastery as an all-or-none description of a student's learning state. Three "mixed" models combine features of both. Approaches to standard-setting follow from each model.

Miller, B. S. (Ed.). *Minimum Competency Testing. A Report of Four Regional Conferences*. St. Louis, MO: CEMREL, Inc.,
G 1978. 79 pp. (Available from Publications Office, Education Commission of the States, Suite 300, 1860 Lincoln Street, Denver, CO 80295--$1.50)

The four regional workshops on minimum competency testing held in the fall of 1977 by the Education Commission of the States and the National Institute of Education are summarized in this report. Remarks, questions and suggestions of the 517 participants are synthesized, showing areas of consensus and disagreement. The first section, "Checking Perceptions," presents the perspectives of legislators, educators and community representatives. Section Two, "Topical Issues" summarizes discussions on six topics: guidelines for selecting minimum competencies, setting standards, instructional management, accountability issues, testing issues, and financing minimum competency programs. The third section, "The Next Step..." contains suggestions for action and study, needs for research and technical assistance, and a list of possible pitfalls. The fourth section, "Background Papers," gives highlights of the five papers prepared for the conferences, as well as others that were informally shared. Appendices include: the text of Henry Brickell's address, "Seven Key Notes on Minimal Competency Testing," descriptions of four states' approaches to minumum competency testing, Chris Pipho's summary of state activity, and a list of conference participants.

Millman, J. Passing Scores and Test Lengths for Domain-Referenced Measures. *Review of Educational Research*, Spring 1973, 43 (2),
M 205-216.

The author reviews procedures for setting passing scores in criterion-referenced measures, considering performance of others, item content, educational consequences, psychological and financial costs, and guessing and item sampling errors. Three methods for determining test length were considered: classical test theory, binomial, and sequential testing. A table is provided relating test length, proficiency standard and required accuracy.

National Assessment of Educational Progress. *Guide for An Assessment of Basic Life Skills*. Denver, CO: Education Commission of
M the States, 1977. 53 pp. ED 139 819. (EDRS Price: MF--$0.83, HC--$3.50 Plus Postage)

Basic life skills items developed by the National Assessment of Educational Progress (NAEP) to measure the achievement of 17-year-olds in the following areas are presented: (1) personal finance and consumer protection skills; (2) health maintenance skills; (3) interpersonal skills; (4) family responsibility skills; and (5) career development skills. Items in these five areas are distributed throughout six packages. These items were constructed to measure performance on the objectives listed in Appendix B. These assessment items can be part of a pool individual teachers may choose from; they can be used as instructional tools; or they can be part of a classroom-, school- or district-wide assessment. In the spring of 1978, NAEP will publish nationwide results for these items. These and the results from a school or school district will allow national comparisons. The more closely NAEP procedures are replicated, the more valid will be comparisons with the national results. In addition to presenting the locations of the various items, the following information is also being provided: a short general description of the item; a NAEP number useful for referring to NAEP results when they become available; an outline code referring to skill areas; and an answer key.

National Association of Secondary School Principals. *Graduation Requirements. [An] NASSP Special Task Force Report.*
G Reston, VA: National Association of Secondary School Principals, 1975. 30 pp. ED 111 071. (Hard copy available from NASSP, 1904 Association Drive, Reston, VA 22091--$0.50. EDRS Price: MF--$0.83 Plus Postage, HC--not available from EDRS)

This report was prepared by a special task force of the National Association of Secondary School Principals to aid professional educators and community groups who may wish to consider possible changes in high school graduation requirements. The report discusses a number of issues surrounding graduation and offers some specific recommendations concerning graduation requirements. Separate brief sections of the report examine current trends in graduation requirements, the meaning of the diploma, verification of requirements, requirements for the diploma, alternative approaches to the diploma, and articulation with postsecondary education. The appendix contains a table that summarizes 1974 graduation requirements for all 50 states.

Neill, S. B. *The Competency Movement: Problems and Solutions.*
G Arlington, Virginia: American Association of School Administrators, 1978. 92pp. (Available from AASA, 1801 N. Moore St., Arlington, VA 22209--$8.95)

This report is the second in the AASA Critical Issues Series, providing a comprehensive, up to date analysis of the reasons underlying the competency movement and offering "how-to" advice for school administrators dealing with minimum competency testing. A list of chapter titles provides an indication of the book's breadth of coverage: What Is the Competency Movement? What Do Administrators Think? Reasons Behind the Movement, Declining Test Scores, Facts and Figures, National Assessment Can Help, What's Happening in the States, What's Happening in Local Districts, How To: Tips and Guidelines on Minimum Competencies, and What are the Basics? This book is perhaps the best single source of information on competency testing.

Northwest Regional Educational Laboratory. *Competency Based Education Sourcebook.* Portland, OR: Northwest Regional
G Educational Laboratory, 1976. 500 pp. (Available from Office of Marketing, Northwest Regional Educational Laboratory, 710 S.W. Second Avenue, Portland, OR 97204--$22.50)

The CBE Sourcebook provides descriptions of resources having potential utility to educators responsible for designing, installing and operating competency based education programs. The resources are compiled into four content categories, corresponding to the components of CBE: outcomes, measures, instruction, and instructional management and recordkeeping. Each document cited is described in terms of several kinds of information, including its purpose, content, intended users, originator, history of development, and cost.

Oliver, G. *School Graduation Requirements in Oregon. A Discussion of the Events Surrounding the 1972 Change in Requirements.*
G Salem, OR: Oregon Department of Education, 1974. 99 pp. ED 098 663. (EDRS Price: MF--$0.83, HC--$4.67 Plus Postage)

The Oregon school graduation requirements, the trends and events that led to their development, and the implementation program that followed their adoption are the subjects of this report. The requirements, adopted in September 1972, call for districts to establish minimum "survival level" competencies that each student must meet in addition to completing modified requirements in designated course and attendance areas. A number of educational trends contributed to the development of the requirements; many of these emerged in meetings and studies that preceded adoption of the requirements. The major implementation actions of the State Department of Education and of several of the State's school districts are reviewed. Arguments for and against accountability in education and competency-based educational programs are also discussed, accompanied by suggested options for future research into the effectiveness of the State's competency-based education. The implementation program of the Albany Union High School District and its relation to actions by the Department of Education are reviewed in an appendix to the main report.

Olson, T. A. *Coping with the Instructional Dimensions of Competency-Based Graduation Requirements.* Paper presented at the Annual
G Meeting of the American Educational Research Association, 1975. 9 pp. ED 108 393. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

The Oregon competency-based graduation requirements--survival competencies--are motivated not so much by public demands for accountability in the normal sense of improved "efficiency" as by the desire to bring about a greater range of alternative learning settings and experiences. There are two sets of research and development questions related to the instructional dimensions of the graduation requirements. One set deals with technical and process concerns such as setting goals, finding adequate assessment and evaluation devices, and establishing improved procedures for instructional design. The second set of questions centers on potential modifications in interactions of roles and responsibilities among individuals and institutions as schools plan to meet the instructional dimensions of the graduation requirements.

Olson, T. A. *Graduation Requirements as a Vehicle for Change.* Paper presented at the Annual Meeting of the American Educational
G Research Association, 1975. 9 pp. ED 108 394. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

The revised Oregon high school graduation requirements, adopted in 1972, are an attempt to respond to attacks on the schools and to clarify the purposes of schooling. The uniqueness of the Oregon approach lies in the mechanism for bringing about change in the schools--a radically revised set of requirements for high school graduation. The focus of the revised graduation requirements is on identification and student achievement of minimum survival competencies in three broad areas: personal development, social responsibility, and career development. The initial focus on specifying, developing, and evaluating pupil competencies provides an opportunity to consider the support and resource needs of the schools as they design and implement mastery learning strategies. The competency-based learning strategies will focus on the specification of competencies, the design and implementation of continuous feedback evaluation systems as students move through the learning experiences, and the summative certification of achievement of the competencies. Research and development related to these issues can improve the knowledge base and provide direction to other states and local education agencies as they seek to bring about reform through the competencies approach.

Oregon Department of Education. *Oregon Graduation Requirements: Administrative Guidelines. Section I.* Salem, OR: Oregon
G Department of Education, 1973. 55 pp. ED 085 864. (Hard copy available from Documents Clerk, Oregon Department of Education, 942 Lancaster Drive, NE, Salem, OR 97310--$1.50. EDRS Price: MF--$0.83, HC--$3.50 Plus Postage)

Since 1969, the Oregon State Board of Education has undertaken to reverse the trend toward providing a single, rigid program for all students, regardless of their abilities, interests, needs, or learning styles. The new standards focus on the concept of providing students an opportunity to learn and demonstrate specific "survival" competencies. Each district must clarify the point of view of "survival" to its own satisfaction in order to identify the basic skills and abilities that all students should acquire as a result of public schooling. Developing a plan for meeting new State requirements for school graduation is an important task for local school districts. These guidelines suggest practical, economical, and flexible approaches.

Oregon Department of Education. *Oregon Graduation Requirements: Guidelines for Planned Course Statements.* Salem, OR: Oregon
G Department of Education, 1974. 52 pp. ED 109 749. (Hard copy available from Documents Clerk, Oregon Department of Education, 942 Lancaster Drive, NE, Salem, OR 97310--$1.50. EDRS Price: MF--$0.83, HC--$3.50 Plus Postage)

These guidelines and sample materials have been developed in response to requests from teachers, curriculum planners, and administrators throughout the state for clarification and modification of Oregon Graduation Requirements, Administrative Guidelines (Section 1), which was published in September 1973. The purpose of these guidelines is to describe the evidence that is required to demonstrate that all courses offering units of credit toward graduation are planned courses, and to provide appropriate models and samples of planned course statements. A planned course is evidenced by a written statement including, but not limited to, the following: course title; course overview; course goals to be achieved in terms of skills, knowledge, and values; and, where appropriate, minimum survival competencies.

Oregon Department of Education. *Oregon Graduation Requirements: Guidelines for Record Keeping Procedures and Sample Forms.* Salem, OR: Oregon Department of Education, 1974. 34 pp. ED 109 750. (Hard copy available from Documents Clerk, Oregon Department of Education, 942 Lancaster Drive, NE, Salem, OR 97310--$1.50. EDRS Price: MF--$0.83, HC--$2.06 Plus Postage)

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These guidelines and sample forms for record keeping are intended to serve as a supplement to Oregon Graduation Requirements, Administrative Guidelines, Section 1 (ED 085 864), which was published in September 1973. The purposes of the guidelines and sample forms are to outline various record-keeping procedures and to provide sample forms that districts may adopt or adapt when implementing the new graduation requirements. The options presented in the guide give districts the flexibility to develop recordkeeping procedures consistent with district needs, preferences, and resources. The district's record-keeping plan should assure that the necessary information regarding credits earned, competencies completed, and attendance requirements met by each student is readily available when needed. The district may continue its existing procedures for recording credits earned and attendance requirements met by students. The task remaining is to supplement those procedures with a means to record the third component of the minimum graduation requirements: minimum survival level competencies.

Oregon Department of Education. *Oregon Graduation Requirements: Models and Guidelines for Personal Development Education. Section II.* Salem, OR: Oregon Department of Education, 1973. 27 pp. ED 085 865. (Hard copy available from Documents Clerk, Oregon Department of Education, 942 Lancaster Drive, NE, Salem OR 97310--$1.50. EDRS Price: MF--$0.83, HC--$2.06 Plus Postage)

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Since 1969, the Oregon State Board of Education has undertaken to reverse the trend toward providing a single, rigid program for all students, regardless of their abilities, interests, needs, or learning styles. The new standards focus on the concept of providing students an opportunity to learn and demonstrate specific "survival" competencies. Each district must clarify to its own satisfaction the point of view of "survival" in order to identify the basic skills and abilities that all students should acquire as a result of public schooling. Following adoption of the new high school graduation requirements for Oregon public schools, teachers and administrators in local districts joined with Department of Education specialists in identifying and describing the minimum or "survival" competencies every student should have on completion of 12 years public schooling. Identification of these competencies was meant to provide all districts with models to be used in selecting and describing those competencies essential to assure all students survival level functioning--at individual, wage-earner, and citizen levels.

Pipho, C. *Update VII: Minimal Competency Testing.* Denver, CO: Education Commission of the States, 1977. 66 pp. (Available from Publications Office, Education Commission of the States, Suite 300, 1860 Lincoln Street, Denver, CO 80295--$6.50, prepaid)

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This report is the seventh in a series of summaries of state legislation, state board of education rulings, and local district activities relating to minimum competency testing. As of November 15, 1977, Pipho notes that 31 states have either enacted legislation or adopted board resolutions mandating some form of minimum competency testing. The report includes brief abstracts of each state's competency testing plans and lists appropriate persons to contact for more information.

Pipho, C. Minimal Competency Testing: A Look at State Standards. *Educational Leadership*, April 1977, 34 (7), 516-520.

G

Pipho reviews the status of minimum competency testing legislation as of early 1977 and suggests that states are "beginning to be more selective about the issues they wish to incorporate into legislation...[and] are asking more questions and studying alternatives before taking action." He offers a list of several questions that educators are wrestling with. The article concludes with brief summaries of 16 states' activities in legislating and implementing minimum competency testing.

Pipho, C. (Ed.). The Minimum Competency Testing Movement. *Phi Delta Kappan*, May 1978, 59 (9), 585-625. (Entire issue)

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Chris Pipho, who served as guest editor for this issue of *Phi Delta Kappan*, assembled a wide variety of articles on minimum competency testing. A wide variety of points of view is represented, ranging from Gene Glass' attack on Florida's program to vignettes of several successful programs. For the reader interested in getting an overview of the issues surrounding minimum competency testing, this issue is highly recommended.

Place, R. A. *The Performance-Based Curriculum*. Speech given before the National Association of Secondary School Principals Annual Convention, 1973. 18 pp. ED 077 118. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

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The author defines the performance-based curriculum, presents some inherent instructional advantages of and attendant obstacles to its inception, and outlines briefly a case study of the Norfolk Public Schools where performance-based curriculum was instituted with some success. He presents performance-based curriculum as a decentralized information system designed to provide instructional data to interested parties; one that employs the concept "teacher-free" (free of significant individual teacher bias and interpretation) and is characterized by its specificity of competencies to be mastered--success evidence, facilitative conditions, and student-centered focus. The development of such a system, the author contends, involves a lengthy piecemeal, step-by-step procedure; the ultimate objective being a fundamental, "single flow" information system concentrating on the teaching-learning process and product. In such a system, communication requirements should be pinpointed, methods for treating the data incorporated, and data feedback facilitated. Implementation of the system on a large scale is best facilitated through the employment of electronic data processing. Involvement of teachers and first level administrators in the fundamental decisions required in the planning, development, and operation of the system for the performance-based curriculum is indicated as essential to the success of the program.

Polgar, E. *The California High School Proficiency Exam*. 1976. 129 pp. ED 129 859. (EDRS Price: MF--$0.83, HC--$7.35 Plus Postage)

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The California High School Proficiency Exam (CHSPE) allows a 16- or 17-year old who passes it to leave school as early as age 15, with parental permission, earning the legal equivalent of a diploma. The exam focuses on basic reading and computing skills. In this study, a variety of findings are reported. School districts have a budgetary disincentive to be receptive to the CHSPE, because every student who exits early results in revenue losses to the district. A long-range budgetary effect of the CHSPE is to shorten the period of total schooling time and result in potential net savings to the state. Choices outside the high school may be limited for CHSPE certificate-holders. Those who pass the exam and stay in school can take more pleasurable courses, yet not worry about making up or taking more required courses. The survey that is included here was used to obtain a profile of the students who do take the exam.

Popham, W. J. Normative Data for Criterion-Referenced Tests? *Phi Delta Kappan*, May 1976, 57 (9), 593-594.

M

Popham argues that normative data is useful in interpreting results on criterion referenced tests. The main advantage of criterion referenced tests (i.e., provision of a clear description of what examinees can or cannot do) is not lost when normative data are available. Popham suggests that normative data helps educators and parents make decisions regarding the quality of performance, and helps them establish realistic proficiency standards.

Pottinger, P. S. *Comments and Guidelines for Research in Competency Identification, Definition and Measurement.*
M Syracuse, New York: Syracuse University Research Corporation, Educational Policy Research Center, 1975. 30pp. ED 134 541. (EDRS Price: MF--$0.83, HC--$2.06 Plus Postage)

This paper responds to the demand generated among competency-based program participants and administrators for definitions of "competence" and new assessment techniques and instruments for its measurement. Discussion centers on three aspects of assessment: 1) the identification and definition of competencies relevant to life and work outside of academia; 2) instrumentation, techniques, and processes of evaluation that provide reliable and valid measures of these competencies; and 3) standardization and/or establishment of levels of performance necessary and sufficient for awarding credentials. Technical problems in these three areas are identified, and directions for future research and development are suggested. Discussion strongly advocates an emphasis for competency assessment and identification that centers on adult development and learning outcomes with special attention to the interactive nature of psychological variables and how skills and abilities are integrated (as is required in life outside of academia). A "psychology of competence" is predicted.

Pottinger, P. S. & Kemp, G. O. *Concepts and Issues Related to the Identification, Measurement and Validation of Competence.*
M Boston: Institute for Competence Assessment, McBer and Co., 1976. 83 pp. ED 134 539. (EDRS Price: MF--$0.83, HC--$4.67 Plus Postage)

This report reflects experiences in the development of new conceptual frameworks for defining learning outcomes that are most desirable for effective life preparation and that emphasize the way people process and integrate information rather than how well people merely store and retrieve information. These new measures, for use in institutions of postsecondary education, must; 1) be sensitive and relevant to important learning outcomes; 2) have general significance to a wide variety of career and life outcomes; 3) have practical utility for educators; 4) be methodologically and technically innovative, e.g., utilize operant rather than respondent behaviors; and 5) be quantifiable and thus amenable to rigorous determination of reliability, validity, and meaning. Keeping in mind these concerns, innovative measures have been developed that attempt to answer the need for more operant measurement and implementation. These measures are described and organized according to their particular outcome domains--cognitive, affective, or social. Of these tests and measures described, none is especially useful as a diagnostic or assessment tool in isolation. Thus, the General Integrative Model, involving the use of several of the tests and measures described, is introduced as one way of evaluating the meaningful integration of life skills.

Rickover, H. G., et al. Do We Really Need a National Competency Test? *The National Elementary Principal*, January 1978, 57
G (2), 47-70.

In this reprint of testimony before the Senate Subcommittee on Education, Arts, and Humanities, Admiral Hyman Rickover presents his indictments of the American school system, concluding with a call for "national scholastic standards,... [and] a formal system of tests to show not only the relative standing of students and schools against national norms but also whether students meet...minimum competency requirements." Following the text of his testimony, the responses of 11 educators are given, challenging the logic and effectiveness of Rickover's solutions to the schools' ills.

Rubin, L. *The Need for Statewide Minimum Competencies in a Thorough and Efficient Education System.* Newark:
G Greater Newark Urban Coalition, 1976. 41pp. ED 127 726. (EDRS Price: MF--$0.83, HC--$2.06 Plus Postage)

This paper attempts to explain the educational and legal implications of New Jersey's 1975 Public Education Act, which was designed to meet the New Jersey Supreme Court's mandate in the landmark case of Robinson v. Cahill. Because the state constitution requires establishment of a "thorough and efficient" educational system, the court ruled that each child must receive an adequate, as well as equal, education. The 1975 act considerably modified the state's educational system in response to that requirement. This paper summarizes the portion of the act that creates the foundation for operation of the state's educational system, as well as the Administrative Code designed

by the State Board of Education to amplify that legislative foundation. Separate sections of the paper discuss the process-oriented philosophy of education that underlies the Administrative Code, the limitations of the process approach, the necessity for statewide minimum competencies as part of the process approach, and the role of the teaching profession in New Jersey's new educational system.

Shepard, L. A. Setting Standards and Living With Them. *Florida Journal of Educational Research*, 1976, 18, 28-32.
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Shepard's paper is an effort to clarify some of the terminology and issues surrounding standards setting in minimum competency testing programs. Her major point is that setting standards is judgmental but not necessarily capricious. Five recommendations for standard setting are offered: setting standards ought to be an iterative process; the normative or experiential basis of judgments ought to be a formal part of the standard-setting process; the most reasonable standard is 'improvement;' allow for differences of opinion by involving various audiences in standard setting; and focusing on minimums may limit the height of educational attainment.

Steiner, R. L. The Case for Competency-Based Education. *Science Teacher*, December 1975, 42 (10), 17-18.
G

The article supports competency-based education because it identifies learning objectives, places the teacher as learning facilitator rather than performer and individualizes instruction. An example of a long-range goal, with competency statements and performance indicators to accompany it, is given.

Thielke, G. A. *Graduation Requirements: What Are the Trends? Bloomfield Hills Public Schools Graduation Requirements, 1978-Present.* Paper presented at the Annual Meeting of the
G National Association of Secondary School Principals, 1976. 13 pp. ED 123 731. (EDRS Price: MF--$0.83, HC--$1.67 Plus Postage)

This document presents the graduation requirements of the Bloomfield Hills public schools. It includes the credits that must be earned in grades 10-12 and the minimum competencies that must be achieved in each of 14 areas, including measurement skills, speaking skills, communication skills, employment and career skills, and physical fitness.

Wise, A. E. *A Critique of "Minimal Competency Testing."* Paper prepared for the Education Commission of the States/National
G Institute of Education Workshops on Minimum Competency Testing, 1977. 45 pp. (Available from Publications Office, Education Commission of the States, Suite 300, 1860 Lincoln Street, Denver, CO 80295--$2.75)

Wise examines some of the implicit assumptions of how education and schools operate that underlie minimum competency testing policies. He points out that the advocates of minimum competency hope to solve the problem of low academic achievement through high level policy interventions. However, he questions whether such legislated or mandated interventions will solve this problem because of many doubtful assumptions about human learning and the bureaucratic nature of the schools.

(Editor's note: This article is reprinted in the May 1978 issue of *Phi Delta Kappan*.)

Zieky, M. J. & Livingston, S. A. *Manual for Setting Standards on Basic Skills Assessment Tests.* Princeton, N.J.: Educational
M Testing Service, 1977. 12 pp. (Available from Basic Skills Assessment, ETS, Princeton, N.J. 08540--$5.00)

The manual is a practical guide for setting standards on minimum competency tests. The overview section defines "standards," and briefly discusses the state of the art in standards setting. The second section presents several social and political issues related to standards setting. The third section constitutes a review of four methods of setting standards: the Nedelsky method, Angoff's method, the borderline-group method and the contrasting-groups method.

(Editor's note: The paper entitled "Standards and Criteria" by Gene V Glass, cited elsewhere in this bibliography, is suggested as a companion piece to this manual.)